Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	
	)	

NORTH DAKOTA NETWORK CO. PETITION FOR WAIVER OF E911 PHASE II LOCATION TECHNOLOGY IMPLEMENTATION RULES

North Dakota Network Co. d/b/a SRT Wireless ("NDNC"), pursuant to Section 1.3 of the Commission's Rules, hereby request a temporary waiver of Section 20.18(g) of the Commission's Rules to allow it to delay the phase-in of its deployment of a handset-based ALI technology in meeting the Enhanced 911 ("E911") Phase II implementation rules.

NDNC is a wholly-owned subsidiary of SRT Communications, Inc. ("SRT"), a rural telephone cooperative that provides local exchange telephone and other telecommunications services in Minot, North Dakota. NDNC is the licensee of stations KNLH232 and KNLH234 in the Broadband Personal Communications Service ("PCS"). Station KNLH232 is a 10 MHz D-Block license in the Minot, North Dakota Basic Trading Area ("Minot BTA") and Station KNLH234 is a 10 MHz F-Block license also in the Minot BTA. NDNC utilizes Nortel's CDMA equipment for its PCS network.

In its E911 technology implementation report filed on November 9, 2000, NDNC notified the Commission of its plans to implement a handset-based solution to provide E911 Phase II capability.

While NDNC indicated that it planned to adhere to the implementation schedule established in the Commission's *Fourth Memorandum Opinion and Order*, 15 RCC Rcd 17442 (2000), it stated that its ability to do so would depend, in large part, on the ability of its equipment suppliers to have their products operational and delivered on time. As of its November 9, 2000 filing, none of NDNC's handset suppliers were forthcoming with information about their development of ALI-capable handsets, and none had been able to commit to a firm schedule for the delivery of these devices. In addition, Nortel, at the time, had not yet provided information about the availability of the needed feature sets for Base Transceiver Station, Base Station Controller and the DMS 100 Dual-Load Switch citing the lack of standards for E911 Phase II compliance.

NDNC Has Demonstrated Its Commitment to Achieving Compliance

Since filing its E911 technology selection report last November, NDNC has been diligent in pursuing deployment of E911 Phase II capability in a timely manner. In addition to maintaining close contact with its equipment suppliers, NDNC holds monthly staff meetings to assess new developments concerning E911 Phase II deployment. NDNC also maintains close contact with the North Dakota 911 Association of Counties, and has attended meetings of that organization. NDNC follows the status of PSAP deployment of E911 technologies because it provides the hardware for the Minot Central Dispatch Center, which is the PSAP for Ward County (at the heart of the Minot BTA, where NDNC provides broadband PCS service). In this regard, through recent conversations with Lt. Fred DeBowey, who is in charge of the Minot Central Dispatch Center, NDNC has learned that Ward County is planning to hold a special election next year to supply the additional funding for the PSAP to gain the functionality to become E911 Phase II capable. NDNC also connects its network to two other PSAPs in the Minot BTA that are further behind in their deployment of Phase II capability.

Despite its best efforts, and due to circumstances beyond its control, NDNC now recognizes that it will not be able to meet the ALI-compliant handset phase-in schedule established in the Commission's *Fourth Memorandum Opinion and Order* and embodied in Section 20.18(g) of the Commission's Rules.

Request for Waiver of Rule Section 20.18(g)

Accordingly, NDNC requests a waiver of Rule Section 20.18(g)(1), to allow it to delay by nine months each of the handset activation deadlines therein; and a waiver of Rule Section 20.18(g)(2), to defer the requirement for upgrading its infrastructure and begin delivering E911 Phase II service to a requesting PSAP until six months from the PSAP request, but no earlier than October 1, 2002.

E911 Implementation Details

1. Required Switch Components and Availability Dates

NDNC purchases switching from its parent company, SRT Communications, Inc. ("SRT"), which uses a Nortel DMS100w wireline/wireless combination switch. SRT is currently on schedule to complete its upgrade from software release LWW0006 to LWW0007 on October 17, 2001. According to NDNC's latest information, Nortel Networks LWW007 (the new software load) is based on the MTX09 wireless generic software release and does not provide the core network capability for E911 Phase II service. Correspondence that NDNC recently received from Nortel indicates as follows:

> The E911 technology for use with the DMS-MTX platform requires a combination of hardware and software which Nortel Networks has designed to operate in accordance with the E911 applicable J-STD-036 standard. The functional elements that constitute the Nortel Networks E911 technology are switch software, RF Access system software, Mobile Positioning Center (MPC) and Positioning Determining Entity (PDE).
>
> Nortel Networks will make the E911 technology elements generally available according to the following schedule.

Component	Role	GA Date
MTX10	Switch software	Q4 2001
NBSS10.1	RF access subsystem	Q4 2001

Nortel Networks will make its combined MPC/PDE generally available in Q2 2002. Because the functions performed by the MPC/PDE are standards based, carriers using the Nortel Networks MTX platform may procure the necessary technology from other vendors and need not wait until Nortel Networks makes its MPC/PDE available to deploy E911. Finally, IOS version 4.0 must be deployed in carriers' networks with equipment from multiple vendors. The IOS software will become generally available in Q1 2002.

This schedule represents Nortel Networks' current plan. This plan could be altered by a number of factors, including unavailability of handsets for testing and resolution of technical issues identified through interoperability testing of the E911 technology with other vendors' technology contributions.

Even after general availability, carriers will need time to deploy the solution across the portions of their networks covered by validated PSAP requests.

Standards

As noted, the E911 technology is standards based. Applicable standards were only approved and published last year. Generally, 18 to 24 months are needed between standard adoption and development of compatible technology. As you will note from the discussion in the above section entitled "Required Components and Availability Details", Nortel Networks has bested or equaled the usual timelines for delivery of functionality after a standard is published.

Field Trial

Nortel Networks endorses an end-to-end field trial before a more extensive roll-out of the E911 technology takes place. The end-to-end field trial is important because, to address the overall goal of the delivery of location information to a PSAP, the E911 technology must successfully interwork with the E911 components supplied by other vendors as well as technologies supplied by other necessary parties, such as the location technology provider and the Local Exchange Carrier.

The successful conclusion of the trial will provide a validated solution across all necessary technologies and parties. To deploy a solution without an end-to-end field trial could lead to remedying the same issues multiple times in a serial fashion. Nortel Networks does not have the resources to deploy the E911 technology simultaneously prior to completion of individual trials and then correct issues that may well be identical. Other necessary parties, such as the location solution vendors and Local Exchange Carriers and even wireless carriers, may have similar limitations.[1]

This correspondence from Nortel is significant because NDNC must rely on Nortel to provide it with the software upgrades and network elements necessary to provide Phase II capability, and Nortel has indicated that its combined MPC/PDE will not

[1] Correspondence received via e-mail on Friday, August 24, 2001, at 1:48 p.m. from Mr. Dave Nielson, Senior Sales Executive, West Region, Nortel Networks. This correspondence cites Mr. Tony Smith, Director, Wireless Regulatory Affairs, as an appropriate contact for further information.

be generally available until at least Q2 of 2002. While NDNC is free to shop for another vendor's MPC/PDE solution, NDNC will nevertheless need Nortel's IOS software installed before it can utilize these elements. Nortel has indicated that the IOS software will not become generally available until Q1 2002. In light of these facts, and because none of the PSAPs in our area will be capable of utilizing Phase II data before the Nortel solution is scheduled to be available, NDNC believes it is best to avoid any potential equipment interoperability issues and to plan on installing the end-to-end Nortel E911 Phase II solution after it becomes generally available.

2. ALI-Capable Handset Availability Dates

NDNC currently utilizes CDMA wireless handsets from Motorola and Kyocera for its customers. Because of the low volume of handset orders that NDNC is able to place at any given time, it uses Carrollton, Texas-based CellStar Corporation ("CellStar") as its distributor for wireless handsets. Otherwise, NDNC would not receive the benefit of volume discounts, thereby increasing the costs for its rural customers. Thus, NDNC does not have the opportunity to negotiate directly with handset manufacturers concerning its purchase of their products. Through its contacts at CellStar, NDNC has learned that Motorola does not have any definitive information for release about its pricing or availability for ALI-capable CDMA handsets that operate on the 1900 MHz frequency band. Kyocera is reported to have two GPS-enabled products in development and slated for release in 2Q 2002.

Waiver Standards

In its *Fourth Memorandum Opinion and Order*, the Commission indicated that the Phase II rules are intended to be applied in a manner that takes into account practical

and technical realities.[2] Recognizing that practical and technical realities might delay Phase II implementation, the Commission established a general approach in dealing with possible requests for waiver of the Phase II requirements.[3] Thus, the Commission provided that its rules may be waived for good cause shown, consistent with Rule Section 1.3.[4] It recognized, in the case of E911, that there could be instances where technology-related issues or exceptional circumstances may mean that deployment of Phase II may not be possible by October 1, 2001.[5] The Commission cautioned that waiver requests should be specific, focused and limited in scope, with a clear path to full compliance; and should document the efforts aimed at compliance.[6]

NDNC Has Met the Waiver Standards

As shown above, NDNC has met the Commission's standards for obtaining the requested waiver of Rule Section 20.18(g). While Section 20.18 of the Commission's Rules imposes E911 Phase II obligations only on Commission licensees (by reason of limitations on the Commission's statutory authority), the Commission has repeatedly acknowledged the obvious, namely that achieving full compliance requires the cooperative efforts of carriers, equipment manufacturers and suppliers and government officials responsible for public safety activities. As a service provider only, NDNC would be unable to achieve compliance with the Commission's Phase II requirements without the availability of necessary equipment and the readiness of the public safety answering points in its area. The simple truth is that there is no technology currently available that will satisfy the Commission's Phase II accuracy requirements within the

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2 15 FCC Rcd 17442, at para. 22.

3 *Id.*, at paras. 42-45

4 *Id.*

5 *Id.*

6 *Id.*

established deadlines.[7] It is only recently that automatic location technology has advanced to the point where Phase II compliance can become a reality. However, once compliant equipment hits the market, it will undoubtedly be several more months before NDNC will be able to order and obtain delivery of this equipment. As a small market carrier, NDNC simply does not have the buying power of the national carriers let alone the clout to influence equipment design and development. If the past is prologue, NDNC will have to wait until the initial handset requirements of the national carriers are satisfied before it will be able to obtain Phase II compliant handsets.

In addition, NDNC could not have anticipated the problems and the delays with having to acquire, install and test a new switch because its switch manufacturer has decided not to upgrade a switch that is barely three years old due to economic issues that are apparently unrelated to E911 Phase II.

The deadline extensions herein requested are in the public interest. They will afford NDNC the additional time needed to upgrade and test its equipment, once the equipment is available, in an orderly manner that is likely to lead to a successful result in providing Phase II service. They will not adversely affect the PSAPs in the area or the public served since none of the PSAPs in the area served by NDNC will be ready for Phase II service for the foreseeable future. As noted above, Ward County, North Dakota is planning to hold a special election next year to supply the additional funding for the Minot Central Dispatch Center to gain E911 Phase II capability. The other two PSAPs in the Minot BTA are further behind in their efforts to implement Phase II capability. NDNC is dedicated to working closely with all of these PSAPs to ensure successful migration to Phase II compliance.

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[7] *See Petition for Waiver*, filed August 3, 2001, CC Docket 94-102, by Triton PCS License Company, L.L.C., at pp. 4-5.

It is, therefore, clear that NDNC has been diligent in pursuing implementation of Phase II but that it is unable to do so due entirely to matters that are beyond its ability to control. The instant waiver request is specific and focused. It details the unavoidable delays NDNC has encountered through no fault of its own. It sets out a clear path to compliance once the necessary equipment becomes available. Moreover, it demonstrates that the public interest will not be harmed by the proposed brief extension, since the PSAP will not be able to utilize the E911 Phase II location information by the October 1, 2001 deadline, even if NDNC was somehow able to achieve compliance by that date. Moreover, a waiver grant would recognize the unique obstacles faced by rural telephone companies participating in the deployment of advanced technologies in small communities and surrounding rural areas. NDNC, which qualified as both a rural telephone company and a small business, faces a limited budget, higher buildout costs due to low population density in its license area, and an inability to place the high volume handset orders that would be given a priority by the equipment vendors. The same cost considerations no doubt are slowing the PSAP's Phase II deployment. Therefore, a waiver grant would be consistent with Section 309(j) of the Communications Act of 1934, as amended, by helping to facilitate the participation of a rural telephone company (and a small business) in the provision of advanced telecommunications services, and by helping to bring such services to all Americans, including those in North Dakota.

Based on information currently available, NDNC believes that it will be able to comply with the following benchmarks:

- July 1, 2002 – Begin selling and activating location capable handsets;
- By September 30, 2002 – Ensure that at least 25 percent of all new handsets activated are location-capable;

- By March 30, 2003 – Ensure that at least 50 percent of all new handsets activated are location-capable;
- By September 30, 2003 - Ensure that all new handsets activated are location-capable;
- By September 20, 2006 – Achieve 95 percent penetration of location-capable handsets among its subscribers;
- By October 1, 2002 or within six months of receiving a PSAP request, whichever is later – Begin delivering E911 Phase II service to the PSAP.

Conclusion

In view of the foregoing, the waiver herein requested is in the public interest and should be granted.

Respectfully submitted,

North Dakota Network Co.
d/b/a SRT Wireless

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